

2020 TRIP GENERATION WORKSHEET - Page 1 of 3

The Trip Generation Worksheet calculates the trips generated within the planning area. It also allocates trips to the proper traffic flow totals (ie. Internal>External trips, Internal<>Internal trips) in order to develop trip tables and make assignments to the existing street system. *The highlighted areas require an input.

Step 1: Estimate the trips generated by the population and development within the future planning area. Population is converted into dwelling units and then multiplied by the trip generation rate. Commercial automobile and truck trips are then estimated and added to this total.

Population Projections	
2020 Population of Whiteville:	7,587
2020 Population of Brunswick:	413
Total:	8,000

DWELLING UNIT TRIPS

2020 Brunswick & W'ville Population (POP):	8,000	
1994-2020 Growth Factor (GR):	1.00	%
2020 Trip Generation Factor/DU (DUTG):	8.00	
2020 Whiteville City Person/DU (PDU):	2.05	
2020 Planning Area Population:	12,402	
2020 # DU's in Planning Area:	6,050	

The 2020 Trip Generation Factor/DU is slightly higher than that used for 1994 to take into account the historic trends. The values for persons/DU were based on the Office of State Budget and Management 2020 values for population and housing. The number of houses outside the city limits was taken from the 1987 USGS quad maps and projected to 1994 (see the 1994 Trip Generation worksheet.) The 2020 planning area population was obtained by multiplying the total number of houses outside the city limits, but within the planning area, (Hc) by the number of person/DU and adding the product to the Whiteville/Brunswick population. The total number of DU's in the planning area was obtained by dividing the total city population by the number of persons/DU and adding this number to the total number of rural DU's.

TABLE 1 gives a breakdown of the number of Dwelling Units by zone (outside the city limits of Whiteville/Brunswick but inside the planning area) and calculates the trips generated. The number of houses outside the city limits was taken from the 1987 USGS quad maps, and are considered rural. The growth factor (GR) is used to estimate the 2020 DU's .

TABLE 2 calculates trips generated within the city limits from the population and person/DU factor. The population is placed into traffic zones by percentages through estimation.